



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450-  
Alexandria, Virginia 22313-1450  
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/720,512	11/24/2003	Anthony G. Karandinos	1999B060 / 3	5158

23455 7590 06/30/2006

EXXONMOBIL CHEMICAL COMPANY  
5200 BAYWAY DRIVE  
P.O. BOX 2149  
BAYTOWN, TX 77522-2149

EXAMINER

RABAGO, ROBERTO

ART UNIT PAPER NUMBER

1713

DATE MAILED: 06/30/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

## Office Action Summary

Application No.

10/720,512

Applicant(s)

KARANDINOS ET AL.

Examiner

Roberto Rábago

Art Unit

1713

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 13 April 2006.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 14-16 and 41-51 is/are pending in the application.
- 4a) Of the above claim(s) 41-50 is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 14-16 and 51 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date \_\_\_\_\_
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_\_

## **DETAILED ACTION**

### ***Continued Examination Under 37 CFR 1.114***

1. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on 4/13/2006 has been entered.

### ***Claim Rejections - 35 USC § 112***

2. Claims 14-16 and 51 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

(a) In claim 14 (and claims 15, 16 and 51 by dependency), the scope of "MFR" cannot be determined because the claim does not state the test conditions.

(b) In claims 14 and 15 (and claims 16 and 51 by dependency), the phrase "propylene sequences" is indefinite because the claim does not indicate the monomer length for determining a "sequence".

Applicants' arguments filed 4/13/2006 have been fully considered but they are not persuasive. Regarding (a), the amendment adding a temperature for the MFR

Art Unit: 1713

measurement does not overcome the rejection because a melt flow rate measurement is meaningless without an indication of both the temperature and the load. The MI limitation of claim 14 is, by itself, also inadequate; however, the specification clearly states at page 68, lines 2-3 under Example 9: "All measured Melt Index (MI) values were measured at 190°C, with a 2.16 kg weight." However, the specification and claims clearly distinguish between MI and MFR, and the specification is silent on the load required for the MFR limitation. ASTM 1238 (attached) clearly states that the test conditions must specify both temperature and load (see section 8.1). There is no single standard test condition for ethylene/propylene copolymers; however, a variety of "Standard Test Conditions" are provided in Table 1. As shown in the table, a temperature of 230°C is indicated with five different loads ranging from 1.2 kg through 21.6 kg. The difference in MFR over this load range could vary much as several hundred-fold, and the claims could also intend for a different, non-standard load to be used; therefore, an indication of both the temperature and the load is required for the MFR limitation to be clearly understood.

Regarding (b), applicants concede, "if every propylene sequence were a diad, the Examiner's reasoning would stand". In fact, a diad is the fundamental tacticity relationship between any two adjacent monomer units, and therefore every sequence, regardless of whether the overall length is diad triad, tetrad, or pentad, consists of diads. Put another way, a percentage of diads can be measured in every polymer for which triads, tetrads, or pentads can also be measured, with the percentage of diads always exceeding the percentage of triads, tetrads, or pentads. Furthermore, claims

are examined using the broadest reasonable scope which is consistent with the specification; therefore, since the sequence length is not specified, then a sequence length of two is within the scope of the claims. As was previously stated, and to which applicants appear to have agreed, for a sequence length of two, the claimed limitation regarding percentages of isotactic and syndiotactic sequences is entirely meaningless because it includes every polymer for which tacticity sequences are definable. It appears that applicants intend for the limitation directed to the percentage of isotactic or syndiotactic orientations to have some meaning; however, as currently drafted in the claims, that meaning cannot be determined.

***Claim Rejections - 35 USC § 102***

3. Claims 14 and 16 are rejected under 35 U.S.C. 102(b) as being anticipated by Nakagawa et al. (EP 870 794) for the reasons set forth in item 7 of the Office action mailed 6/24/2005.

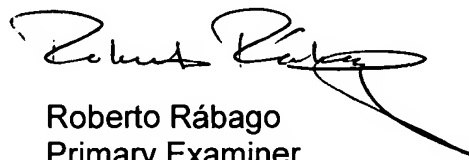
Applicants' arguments filed 4/13/2006 have been fully considered but they are not persuasive. The amendment directed to MFR does not preclude the cited reference example because the claim does not state how the measurement was made, for the reasons advanced above.

4. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Roberto Rábago whose telephone number is (571) 272-1109. The examiner can normally be reached on Monday - Friday from 8:00 - 4:00.

Art Unit: 1713

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, David Wu can be reached on (571) 272-1114. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

A handwritten signature in black ink, appearing to read 'Roberto Rábago', with a long, sweeping horizontal stroke extending to the right.

Roberto Rábago  
Primary Examiner  
Art Unit 1713

RR  
June 23, 2006